Android App for Reporting the Hazardous Problem

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Abstract—Human life is required to be safe considering various issue that he faced day today life. In this system, we can provide the facility to common users to complaint about hazard. System authority take quick action regarding hazardous area and solved the problem by using information retrieval and extraction. The objective is to promote the cities that provide core infrastructure and give decent quality of life to its citizen, a clean and sustainable environment and application of smart solution. The problem is challenged by : how to become clean and sustainable environment for citizen and involvement of technology and citizen. The system propose android app, to complaint their problem to central authority as well as higher authority. To make relief from hazard problem which achieve managerial reform and involvement of citizen. Hazard reporting software used by various smart cities, largest companies most renowned names large and small over the world.

Index Terms—Hazardous, Global Positioning System(GPS), Application Programming interface(API), Mobile Computing, Distributed Computing, Client-server model, Authentication Processing

I. INTRODUCTION

Nowadays aim of people to live in the smart city. But the smart city suffer from many hazardous problem. what is the meaning of smart city? smart city it uses digital technique and information and communication technique for the good infrastructure for citizen. And hazard is nothing but situation or thing that potential causes the harm to people ,property or the environment.

A mobile application is available for the common user in order to update hazardous problem by capture the capture the image and location of the area is send to the server and responsible authority is informed.In existing system, people do not have any central platform where they can report all their issues. The objective of the system is to send the images, audio or video of hazardous objects, select the concerned authorities and risk level and synchronous it to the server with their GPS location. Authority can solve the problem. It is the very useful app for the people who to dosomthing for the society.

In existing system, people do not have any central platform where they can report all their issues. So government does not understand the exact problem and their location. In Proposed system, we are developing one central platform where all issues can be reported with their location to respective departments. Using this system, we can keep track of the ratio of complaints registered and issues which are unsolved. Hazard reporting gives involvement of technology and citizen and it provide facility to and organization to solve problems. It also involve higher authority and the social media as third party.

II. LITRATURE SURVEY

1. A framework of customer complaint handling system.
   It work for an integrated framework of customer complaint handling system including complaint reporting, also the compensation diagnosis, complaint searching, and complaint analysis.

2. Real-time geospatial data collection and visualisation with smart phone.
   It work for field data collection using a smartphone and web-based GIS system, which collects, integrates, visualizes and analyzes the collected data in realtime.

3. Hazard object reporting to respective authorities.
   It work for developing a central platform where normal people can submit their issues to respective authorities. The user need to capture real time images, videos or audios of hazardous objects, select the concerned authorities and risk level and sync it to the server with their GPS location.

3. Mobile phone as a tool for data collection in field.
   It work for the data gathering process begin with the survey creation module, which enable the production of tailored questionnaires and collect the interview responses and sending them back to server for immediate analysis.

4. Smart city readiness understand the issues to accelerate the journey.
   Improving planning and achieving the better understanding of the cost and benefits of smart city as they are undertake the step recommended here they can move beyond the current barriers and start to capitalise on the benefits of smart city.

5. A smartphone-cloud application as an aid for street safety inventory.
   The clouds application utilises and artificial neural network that is trained to differentiate between a shock resulting from normal driving maneuvers from those possibly resulting from road problems. It also analysis there location and based on frequency of reporting a certain shock data from the same geographical location and it report strict hazard location.

III. EXISTING SYSTEM

The people not have any central platform where they can report all their issues. So government does not understand the exact problem and their location. The people were submit their problem only to the single authority where they not get actual satisfaction of their problem.

IV. PROPOSED SYSTEM

We are developing one central platform where all issues can be reported with their location to respective departments. The
present a mobile application to test the performance of Android location service and to collect the positioning results as well. They also carried out some experiments to evaluate the quality of the location service and the reliability of GPS and WPS at a dense urban area. However, the recent era of developments in mobile communication Global Navigation Systems, the Internet and portable computational devices such as Netbooks or Ultra Mobile Personal Computers (UMPC) allow us to conduct field data collection in a timely manner. Moreover, under the client-server setting for field data collection, a field user that may take advantage of digital repositories prepared for data collection (i.e. basemaps, satellite images and other ancillary data), as well as information resources more generally available via the Web. The 3 options provided for the user in this system that are pictures, audio and video. Many times it happens that the real time probes are occurs like peets on road and garbage related issues that time user can make use of its camera options and send to the web portal.

In this system the user report their issues using android phone on which this app is installed. The report through the cellular network goes to the server, the basic information about the user is stored on the mongodb server like title of problem, their description, the location of problem is also found through the web GIS. Then when this issue comes to the server then the central authority categories the problem to assigned the work which authority can solve this issues then he assigned the work. In this way the problem get report to the respective authority through central authority.

Fig. System architecture

V. ALGORITHM

1) Registration for the user
2) Sending the problem using image, audio or video.
3) Acknowledgement message is send to user that your problem has been submitted by the server.
4) Location of problem track through GPS system.
5) On the basis of types of problem it send to respective authority by the central platform.
6) If the problem is not solved it send to higher authority.
7) After solving the problem message is send to user that your problem has been solved.
8) If any of the employee does not do his work we can take action through social media.

VI. DESIGN AND IMPLEMENTATION

In hazard reporting system set two modules are Web portal using MongoDB is for organization employees and Android application and SQLite is for common users and both have set with some responsibility. Common user first have to register on android application. After registration user can login & Send the hazard report which contains the image, data, audio to the specific departments. User can also edit hazard report. Maximum three times in a day allow user to send the report. Organization has web portal application in this first organization have to register and assigning the organization roles e.g. police, News Paper, Higher authority. In application organization can see the complaints related to the user. Assign the work to the particular employee. The Application provide feature to organization to Change the status of the complaints. If changes status by organization then system Send message to the particular user. Organization complete his task in time limit then system generates positive rates otherwise negative rate it give to particular organization. After complete task system send message to common user “Complaint solved “status on his mobile number side.

Advantages:
1. Single platform to report issues – time saving
2. No need to physically report the issues.

Feature:
1. Reporting dashboard with custom forms and registries.
2. The history of reporting issue is save at android mobile site as well as web server side.
3. The location of problem that is where issue occurs is identify by GPS location
4. Perfect for locating in the area where hazards occur.
5. Easy to use and a great tool in hazard reporting

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VII. CONCLUSION

We can conclude that Android app for reporting the hazardous problem provide facility to common user to compliant the respective organization about hazard. System can take immediate action respected to the hazardous areas and solve hazards problem by using data extraction and access and hazard reporting algorithm. This system is time required less. We are developing this system to make central platform available for illiterate and normal people to submit their issues. Using this application user going to send these issues to the corresponding department of government where they can see the issues location wise.

VIII. FUTURE SCOPE

The proposed system make use of photo, audio, and video for taking the evidence to send to the web server. But in future we can make use of sensor to automatically diagnosis the problem which occurs in the villages, rural areas and the city to reduce the burden of the burden of civilization. So by making the use of sensor the user need to go report the problem to the authority instead of this the sensor can automatically sense the public issues and automatically send to the authorities.

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